Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An antifibrillogenic agent for inhibiting amyloidosis and/or for cytoprotection comprising a-peptide consisting essentially of ANX (SEQ. ID. NO. 28), wherein X is any amino acid except cysteine, ~~selected from the group consisting of penta-, tetra-, and tri- peptides of truncated ANFLVH (SEQ. ID. NO. 11),~~ or an isomer thereof, a retro or a retro-inverso isomer thereof, ~~a peptidomimetic thereof,~~ or a salt thereof.
2. ~~2.~~ (Currently Amended) The antifibrillogenic agent of claim 1, wherein X is I or F. ~~said peptide is ANFLV (SEQ. ID. NO. 22), ANF (SEQ. ID. NO. 24), or NFL (SEQ. ID. NO. 33), an isomer thereof, a retro or a retro-inverso isomer thereof, a peptidomimetic thereof, or a salt thereof.~~
3. (CurrentlyAmended) The antifibrillogenic agent of claim 1, wherein the agent comprises a ~~tripeptide selected from the group consisting of~~ peptide consisting essentially of ANF (SEQ. ID. NO. 24), ~~ANX (SEQ. ID. NO. 28), AXF (SEQ. ID. NO. 29), and XNF (SEQ. ID. NO. 30), where X is any amino acid except cysteine,~~ or an isomer thereof, a retro or a retro-inverso isomer thereof, ~~a peptidomimetic thereof,~~ or a salt thereof.
4. (Cancelled)
5. (Canceled)
6. (Canceled)
7. (Canceled)
8. (Canceled)
9. (Currently Amended) The antifibrillogenic agent ~~peptide~~ of claim ~~8~~1, wherein said peptide is ~~ANFLV (SEQ. ID. NO. 22) or ANF (SEQ. ID. NO. 24)~~ ANX (SEQ. ID. NO. 28) wherein X is any amino acid except cysteine~~, or an isomer thereof, a retro or a retro-inverso isomer thereof, a peptidomimetic thereof, or a salt thereof~~.
10. (Currently Amended) The antifibrillogenic agent ~~peptide~~ of claim ~~8 1~~9, wherein X is I or F. ~~said peptide is a tripeptide selected from the group consisting of ANF (SEQ. ID. NO. 24),~~

~~ANX (SEQ. ID. NO. 28), AXF (SEQ. ID. NO. 29), and XNF (SEQ. ID. NO. 30), where X is any amino acid except cysteine, or an isomer thereof, a retro or a retro inverso isomer thereof, a peptidomimetic thereof, or a salt thereof.~~

11. (Presently Amended) The antifibrillogenic agent ~~peptide~~ of claim 10, wherein the peptide is ~~selected from the group consisting of~~ ANF (SEQ. ID. NO. 24), ~~GNF (SEQ. ID. NO. 25), and AGF (SEQ. ID. NO. 26), or an isomer thereof, a retro or a retro inverso isomer thereof, a peptidomimetic thereof, or a salt thereof~~.

12. (Canceled)

13. (Currently Amendedl)The antifibrillogenic agent ~~tripeptide~~ of claim ~~1~~10, wherein said amyloidosis is IAPP-related.

14. (Currently Amended)The antifibrillogenic agent ~~tripeptide~~ of claim 10, wherein said amyloidosis is type 1 or type 2 diabetes.

15. (Currently Amended) A composition for inhibiting amyloidosis and/or for cytoprotection, comprising a therapeutically-effective amount of the antifibrillogenic agent ~~peptide~~ of claim ~~8~~ 1 in association with a pharmaceutically-acceptable carrier.

16. (Currently Amended) A composition for inhibiting amyloidosis and/or for cytoprotection, comprising a therapeutically-effective amount of the antifibrillogenic agent ~~peptide~~ of ~~any one of~~ claims ~~9-11~~ 10 in association with a pharmaceutically-acceptable carrier.

17. (Canceled)

18. (Canceled)

19. (Canceled)

20. (Canceled)

21. (Canceled)

22. (Canceled)

23. (Canceled)

24. (Canceled)

25. (Canceled)

26. (Canceled)

27. (Canceled)

28. (Canceled)

29. (Canceled)

30. (Canceled)

31. (Canceled)

32. (Withdrawn) A method for the treatment of amyloidosis disorders in a patient, comprising administering to said patient a therapeutically-effective amount of the antifibrillogenic agent of ~~any one of~~ claims 1 ~~to 7~~.

33. (Withdrawn)The method of claim 32, wherein said amyloidosis disorder is IAPP-related.

34. (Withdrawn)The method of claim 33, wherein said amyloidosis disorder is type 1 or type 2 diabetes.

35. (Withdrawn)The method of claim 34, wherein said antifibrillogenic agent is administered in conjunction with another agent selected from the group consisting of insulin, sulfonylurea, and glucose sensitizers.

36. (Canceled)

37. (Canceled)

38. (Canceled)

39. (Canceled)

40. (Withdrawn) A process for the preparation of cells suitable for transplantation into a mammal, which cells are capable of forming amyloid deposits, said process comprising contacting cells *in vitro* with the antifibrillogenic agent of ~~any one of~~ claims 1 ~~to 7~~ for inhibiting amyloid deposit formation.

41. (Withdrawn) The process of claim 40, wherein said antifibrillogenic agent causes breakdown of amyloid deposits, the deposits having been formed by said cells prior to said contact.

42. (Withdrawn) The process of claim 40, wherein said cells are cultured in the presence of said antifibrillogenic agent.

43. (Withdrawn) The process of claim 40, wherein said amyloid deposits comprise IAPP amyloid.

44. (Withdrawn) The process of claim 40, wherein said amyloid deposits are associated with type 1 or type 2 diabetes.

45. (Withdrawn) The process of claim 40, wherein said cells, prior to treatment, form amyloid deposits.

46. (Withdrawn) Cells suitable for transplantation into a mammal, which have been prepared by the process of claim 40.

47. (Withdrawn) A method for treating a type 1 or type 2 diabetes patient after transplantation, said method comprising the step of administering *in vivo* to said patient the antifibrillogenic agent ~~of any one~~ of claims 1 ~~to 7~~ for inhibiting, preventing, and/or reducing amyloid deposit formation and amyloidosis.

48. (Withdrawn) The method of claim 47, wherein said amyloid deposit formation and/or amyloidosis is IAPP-related.

49. (Withdrawn) The method of claim 47, wherein said composition is administered in conjunction with another agent selected from the group consisting of insulin, sulfonylurea, and glucose sensitizers.

50. (Withdrawn) A method for inhibiting amyloidosis and/or for cytoprotection, comprising administering to a subject a therapeutically-effective amount of the antifibrillogenic agent of any one of claims 1 to 7, wherein said antifibrillogenic agent prevents or reduces amyloid deposition.

51. (Canceled)

52. (Canceled)

53. (Canceled)

54. (Canceled)

55. (Canceled)

56. (Canceled)

57. (Withdrawn) A method for identifying an optimized peptide for inhibition of amyloidosis, comprising the steps of:

(a) choosing an original peptide selected from the group consisting of ANF (SEQ. ID. NO. 24), GNF (SEQ. ID. NO. 25), AGF (SEQ. ID. NO. 26), and NFL (SEQ. ID. NO. 33),

(b) systematically substituting at each residue a different amino acid,

(c) testing the ability of each derivative to inhibit amyloid fibril formation, and

(d) comparing the inhibition of each derivative with the inhibition of the original peptide, wherein an increase in inhibition of the derivative as compared with the original peptide indicates an optimized peptide.

58. (Withdrawn) The method of claim 57, wherein the different amino acid is chosen from the group consisting of Gly, Ala, Val, Leu, Ile, Ser, Thr, Met, Asp, Asn, Glu, Gln, Arg, Lys, His, Phe, Tyr, Trp, and Pro.

59. (Withdrawn) The method of claim 57, wherein the original peptide is ANF (SEQ. ID. NO. 24).

60. (Withdrawn) The method of claim 57, wherein the testing for inhibition comprises at least one *in vitro* assay system selected from the group consisting of CD, EM, and cell toxicity.

61. (Withdrawn) The optimized peptide identified using the method of claim 57.